WHAT IS CLAIMED IS:

1. An apparatus for film deposition equipped with a vacuum chamber capable of maintaining vacuum therein, in which a film is deposited on surfaces of a substrate, which comprises traveling means for vertically traveling a continuous sheet as the substrate; and a pair of film deposition means for continuously depositing the film on the surfaces of the continuous sheet; said film deposition means being vertically arranged and horizontally faced each other, and said continuous sheet being traveled between a pair of the film deposition means.

2. The apparatus according to claim 1, wherein film deposition sources in said film deposition means are a pair of magnetron sputtering cathodes.

3. The apparatus according to claim 1, wherein said continuous sheet is at least one selected from the group consisting of a web, a knit and a non-woven fabric, each formed of organic fibers.

4. The apparatus according to claim 3, wherein said continuous sheet is a non-woven fabric having a mass of 5 to 300g/m^2.

5. The apparatus according to claim 2, wherein a target material for said cathodes is cobalt, copper, zinc, titanium, silver, tin, or an alloy thereof.

6. The apparatus according to claim 1, wherein a gas used for said film deposition is an inert gas, or a gas mixture of the inert gas and one or more kinds selected from the group consisting of oxygen-containing gas, nitrogen-containing gas and carbon-gas containing.

7. The apparatus according to claim 3, wherein the non-woven fabric having a mass of 40g/m^2 is used as said continuos sheet, a tension applied thereto is in the range of 1 to 15N/m.

8. A process for film deposition in which a film is deposited on surfaces of a substrate in a vacuum chamber capable of maintaining vacuum therein, which comprises the steps of vertically traveling a continuous sheet as a substrate; and continuously conducting a film deposition on the surfaces of the continuous sheet; the film deposition being conducted horizontally on the surfaces of the vertically traveling continuous sheet.